U.S. Pat. Appl. Ser. No. 10/553,112
Attorney Docket No. 10191/4153
RCE Reply to Final Office Action of September 8, 2009
(in lieu of Appeal Brief first due on December 28, 2009)

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1-11. (Canceled).

12. (Previously Presented) A method for a rollover stabilization of a vehicle in a critical driving situation, the method comprising:

measuring different driving-condition variables by a sensor system;

causing an actuator to intervene with a rollover-stabilization algorithm in a vehicle operation in a situation critical to rollover, in order to stabilize the vehicle; and

estimating, only in predetermined driving situations, information from a relationship between a steering variable and a roll variable, the information relating to a rollover tendency of the vehicle and being taken into account in a scope of the rollover stabilization.

13. (Previously Presented) The method as recited in Claim 12, further comprising:

ascertaining one of an indicator variable and one of a characteristic property and a variable of the rollover stabilization as a function of the rollover tendency, wherein:

a stabilization action is one of enabled and deactivated in accordance with the indicator variable.

14. (Previously Presented) The method as recited in Claim 12, wherein the steering variable includes a steering angle.

15. (Previously Presented) The method as recited in Claim 12, wherein the roll variable includes a roll rate.

16. (Previously Presented) The method as recited in Claim 12, further comprising:

changing, as a function of the rollover tendency, a control threshold of the rollover-stabilization algorithm.

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17. (Previously Presented) The method as recited in Claim 12, further comprising:

ascertaining, from the steering variable and the roll variable, a rollover indicator indicating the rollover tendency of the vehicle.

18. (Previously Presented) The method as recited in Claim 17, wherein the rollover indicator is determined by a fuzzy-information processing unit.

19. (Previously Presented) The method as recited in Claim 18, further comprising:

weighting the rollover indicator by a weighting function indicating a quality of an estimation of the rollover indicator.

20. (Withdrawn) A vehicle-dynamics control system for a rollover stabilization of a vehicle in a critical driving situation, comprising:

a control unit for storing a rollover-stabilization algorithm;

a sensor system for measuring current, actual values of the control system;

an actuator for executing a stabilization action, wherein:

the sensor system ascertains a roll variable and a steering variable; and

a device for estimating a rollover tendency of the vehicle from the steering variable and the roll variable, the rollover tendency being taken into account in a scope of the rollover stabilization.

21. (Withdrawn) The vehicle-dynamics control system as recited in Claim 20, wherein the control unit ascertains one of an indicator variable, with the aid of which a stabilization action is one of enabled and deactivated, a characteristic property, and a variable of the rollover-stabilization algorithm, as a function of the rollover tendency.

22. (Withdrawn) The vehicle-dynamics control system as recited in Claim 20, wherein the sensor system includes a roll-rate sensor for ascertaining the roll variable.

23. (Withdrawn) The method as recited in Claim 12, wherein the steering variable includes a steering speed.

24. (Withdrawn) The method as recited in Claim 12, wherein the roll variable includes one of contact patch forces of wheels, a compression travel, a vertical acceleration, and a roll angle.

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25. (Withdrawn) The method as recited in Claim 12, further comprising:

changing, as a function of the rollover tendency, one of a control deviation and a controlled variable of the rollover-stabilization algorithm.

26. (Previously Presented) The method as recited in Claim 12, further comprising:

ascertaining one of an indicator variable and one of a characteristic property and a variable of the rollover stabilization as a function of the rollover tendency;

changing, as a function of the rollover tendency, a control threshold of the rollover-stabilization algorithm;

ascertaining, from the steering variable and the roll variable, a rollover indicator indicating the rollover tendency of the vehicle; and

weighting the rollover indicator by a weighting function indicating a quality of an estimation of the rollover indicator.

27. (Previously Presented) The method as recited in Claim 12, wherein:

a stabilization action is one of enabled and deactivated in accordance with the indicator variable,

the steering variable includes a steering angle,

the roll variable includes a roll rate, and

the rollover indicator is determined by a fuzzy-information processing unit.

28. (Previously Presented) The method as recited in Claim 12, further comprising:

ascertaining one of an indicator variable and one of a characteristic property and a variable of the rollover stabilization as a function of the rollover tendency;

changing, as a function of the rollover tendency, a control threshold of the rollover-stabilization algorithm;

ascertaining, from the steering variable and the roll variable, a rollover indicator indicating the rollover tendency of the vehicle; and

weighting the rollover indicator by a weighting function indicating a quality of an estimation of the rollover indicator;

wherein a stabilization action is one of enabled and deactivated in accordance with the indicator variable,

wherein the steering variable includes a steering angle,

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wherein the roll variable includes a roll rate, and

wherein the rollover indicator is determined by a fuzzy-information processing unit.

29. (Previously Presented) The method of claim 12, wherein the estimation is performed for at least one of a particular transverse acceleration and a particular steering speed.

30. (New) The method as recited in Claim 12, wherein the estimation is performed only in a driving situation which satisfies at least one specified condition of the steering angle.

31. (New) The method as recited in Claim 12, wherein the estimation is performed only in a driving situation which satisfies at least one specified condition of a transverse acceleration or another variable describing lateral-motion dynamics of the vehicle.

32. (New) The method as recited in Claim 30, wherein the estimation is performed only in a driving situation which satisfies at least one specified condition of the steering angle and which satisfies at least one specified condition of a transverse acceleration or another lateral-motion dynamics variable of the vehicle.